

DOCUMENT-IDENTIFIER: US 20030021727 A1

TITLE: Urine test device

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Summary of Invention Paragraph - BSTX (7):

[0005] A number of other variations of this type of device have been designed where a specialized cap is provided with assay test strips and with a valve of some type that can be manipulated while the cup remains closed and thus cannot contaminate the person carrying out the test. Devices of this type are shown in U.S. Pat. Nos. 4,690,801; 5,429,804; 5,501,837; 5,591,401; and 6,074,606. Test devices of the same theme have been developed to fit with a rectangular container where the lid is of two-part construction, interconnected by a living hinge; chemical test strips are provided in a test space located in a compartment on the underside of the inner cover into which the specimen can pass once a frangible closure is broken, as shown for example in U.S. Pat. No. 5,640,969 and 5,882,600. In another variation on this theme, U.S. Pat. No. 6,168,758 shows a specialized cap which is threaded onto a cylindrical specimen cup and includes a plurality of chromatography strips which will visually display the assay result. Once the cap is secure, the container is inverted causing a reservoir underside of the cap to fill and collect a predetermined volume of the liquid specimen with the specimen being transmitted via wicking. During the filling of the reservoir, the intention is that a valve member will automatically swell, by absorption of liquid, and eventually close the passageway so that there will no longer be

communication between the filled reservoir and the remainder of the specimen sample in the container itself. A further variation on this theme is shown in U.S. Pat. No. 5,403,551 where, instead of locating the assay test elements on the underside of the cap, they are located in a separate chamber constructed in the side wall of the specimen container itself, having an entrance opening near the very top thereof. Once the donor has contributed the specimen, a screw-on cap is applied, and through rotative positioning of the cap, a valve leading to the side wall chamber can be opened or closed. By opening the valve and inverting the cup, the reservoir in the side chamber can be filled with a sample of the specimen while the cap remains in an essentially closed condition. The results of the testing can be observed through the transparent side wall of the chamber or the like. A device shown in U.S. Pat. No. 4,473,530 is generally similar.